

DOCUMENT RESUME

ED 071 107

CS 500 082

AUTHOR Lashbrook, Velma J.; Lashbrook, William B.
TITLE A Theoretical and Methodological Evaluation of
Leadership Research.
PUB DATE 72
NOTE 23p.; Paper presented at the Annual Convention of the
Western States Speech Communication Assn. (Honolulu,
November 1972)
EDRS PRICE MF-\$0.65 HC-\$3.29
DESCRIPTORS Conceptual Schemes; Evaluation; *Group Dynamics;
*Leadership; *Leadership Styles; Methods Research;
Research Methodology; *Theories; Validity

ABSTRACT

This paper isolates some of the strengths and weaknesses of leadership research by evaluating it from both a theoretical and methodological perspective. The seven theories or approaches examined are: great man, trait, situational, style, functional, social influence, and interaction positions. General theoretical, conceptual, and measurement issues are considered as they relate to methodology. If theoretical and methodological improvements are made, the study concludes, leadership research can make a significant contribution to our accumulation of knowledge concerning small groups. (Author)

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRO-
DUCED EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIG-
INATING IT. POINTS OF VIEW OR OPIN-
IONS STATED DO NOT NECESSARILY
REPRESENT OFFICIAL OFFICE OF EDU-
CATION POSITION OR POLICY

ED 071107

A THEORETICAL AND METHODOLOGICAL EVALUATION
OF LEADERSHIP RESEARCH

by

Velma J. Lashbrook
Woodruff High School

and

William B. Lashbrook
Illinois State University

PERMISSION TO REPRODUCE THIS COPY-
RIGHTED MATERIAL HAS BEEN GRANTED
BY Velma J. Lashbrook

William B. Lashbrook

TO ERIC AND ORGANIZATIONS OPERATING
UNDER AGREEMENTS WITH THE U.S. OFFICE
OF EDUCATION. FURTHER REPRODUCTION
OUTSIDE THE ERIC SYSTEM REQUIRES PER-
MISSION OF THE COPYRIGHT OWNER.

Presented to:
Western States Speech Communication Assoc.
1972 Convention
Honolulu, Hawaii

CS 500 082

A THEORETICAL AND METHODOLOGICAL EVALUATION OF LEADERSHIP RESEARCH

Small group researchers in sociology, social psychology, and speech communication have devoted more attention to the study of leadership than any other concept in the small group process. The production rate of leadership studies is high and steadily increasing. However, the accumulation of knowledge in this area is not that significant. This paper attempts to isolate some of the strengths and weaknesses in leadership research by evaluating it from both a theoretical and a methodological perspective.

Theoretical Evaluation

A theory has been defined as "...a systematically related set of statements, including some lawlike generalizations, that is empirically testable" (Rudner, 1966). The definition suggests at least three criteria for evaluating a theory: that the theoretical statements should be systematically related, that the statements should include some lawlike generalizations, and that the statements should be empirically testable. These three criteria will be employed in the evaluation of the theories or approaches.

The seven approaches examined in this paper are the great man, trait, situational, style, functional, social influence, and interaction positions. The great man approach, the first attempt to explain leadership, suggests that great changes in an organization or in society almost always result from the efforts or powers of a few superior individuals. Hook (1943) described two kinds of great men: the eventful man and the event making man. The eventful man was a great man who happened to be in the right place at

the right time to become a leader. The event making man was a great man who created great events. A second description of great men (Jennings, 1960) posited three types: supermen, heroes, and princes. Supermen were described as rule breakers and value creators; heroes were defined as leaders of great and noble causes; and princes were men who knew the game and manipulated their followers. Proponents of this approach used biographical analyses to describe leadership.

Many have argued that the great man approach to leadership with its stress on uniqueness and emergence is not really amenable to social scientific investigation. However, arguments based on uniqueness give no support at all to the position that there must be a radical divorce between the methodologies of the nonsocial and the social sciences. For if one extended the uniqueness argument all science would be impossible. The emergence dimension of a great man approach holds the position that it is non-scientific on the grounds that it is non causal. There appears some merit in this position from a relative sense, however, to imply closure (no possibility of causal prediction) seems unjustified. The history of science reveals several instances of phenomena like the emergence of great men to stimulate great causes which have subsequently been shown not to be outside the pattern of lawlike regularity of other events. The great man approach can in fact be properly evaluated in terms of how well it provides a structure for theoretical considerations. To remove it from such considerations by design, even rhetorically, seems unfortunate and naive.

To date the great man approach meets none of the structural criteria necessary for a theory: it has no lawlike generalizations, it has no set of systematically related statements, and it is empirically

untestable. Further, the approach has traditionally been limited to the examination of historical figures and offers little on a basis for predicting leadership.

The trait approach contends that certain individuals possess characteristics that allow them to become Leaders. Numerous studies have attempted to discover the relationship between various personality, biographical and behavioral characteristics, and leadership in the small group. Several summaries of leadership traits have been reported. Bird (1940) synthesized 20 studies in which 79 traits were found to be related to leadership. He found that 51 (65 percent) of the variables were mentioned only once, 16 (20 percent) were listed twice, 4 (5 percent) were identified in three, another 4 (5 percent) were found in four studies, two were mentioned in five, one was identified in six, and one was found in ten studies. Those variables identified in three studies were courage, originality, tact, and self-reliance. Enthusiasm, fairness, self-confidence, and sympathy were found in four. The two identified in five studies were extraversion and sense of humor. Initiative was found in six and Intelligence was identified in ten studies.

Perhaps the most widely acclaimed summary and synthesis of trait studies was reported by Stogdill (1948). He suggested five major classifications for leadership characteristics:

1. Capacity (intelligence, alertness, verbal facility, originality, judgement)
2. Achievement (scholarship, knowledge, athletic accomplishment)
3. Responsibility (dependability, initiative, persistence, aggressiveness, self-confidence, desire to excel)

4. Participation (activity, sociability, cooperation, adaptability, humor)
5. Status (socio-economic position, popularity)

In addition, he mentioned that these characteristics may vary with the situation (group characteristics and goals).

Although Stogdill established a classification scheme for leadership traits, he noted that the traits have not been found to be consistently related to leadership. He did find that 15 or more studies suggested that leadership is related to: intelligence, scholarship, dependability, activity, and social participation. Ten or more studies found leadership to be related to: sociability, initiative, persistence, procedural ability, self-confidence, alertness and insight into situations, cooperativeness, popularity, adaptability and verbal facility. Some characteristics were suggested to apply only to specific groups (i.e., athletic ability was associated with leadership in boys' gangs and play groups). The variables identified to have the highest correlations with leadership were: originality, popularity, sociability, judgement, aggressiveness, desire to excel, humor, cooperativeness, liveliness, and athletic ability. There was also some evidence that former leadership experiences transfer.

McGrath and Altman (1966) have provided a third list of leadership characteristics in their synthesis of small group research:

1. Individual personality characteristics such as extroversion, assertiveness, and social maturity, but not a host of other seemingly similar characteristics;
2. Education but not age or other biographical characteristics;
3. Intelligence, general ability, and task ability;
4. High group status; and
5. Training in leader techniques.

McGrath and Altman examined 25 studies which tested the relationship between leadership performance and variables in 10 other classes. A total of 275 associations were tested of which 120 were significant. The authors have indexed the relationships by variable class and have indicated the proportion of significant relationships found between the variables. The characteristics listed above were significantly related to leadership performance at least 60 per cent of the times the relationship was tested. An examination of the three summaries reported here does not provide a conclusive list of leadership traits.

As a theory the trait approach falls short of meeting the criteria. It does provide generalizations concerning the traits associated with leadership, but the statements are neither lawlike nor systematically related. The generalizations, however, are empirically testable. One of the most significant problems associated with trait research is the restrictive nature of the conception and measurement of traits. The range of traits has been limited, in most cases, to personality traits identified by psychology. This has resulted in the exclusion of many behavioral, attitudinal, and situational variables which may affect leadership. The problem of measurement may be a result of the heavy reliance on personality tests derived for purposes other than predicting or describing communication behaviors (i.e., clinical evaluation).

Primarily as a reaction to the weaknesses of the trait approach, the situational approach emerged. Most of the research which has been based on this approach has attempted to demonstrate that traits do not account for leadership emergence in all situations (Barnlund, 1962 and Newcomb, Turner,

and Converse, 1965). Perhaps the most exhaustive study supporting the situational approach was conducted by Fiedler (1968). Fiedler directed a 15 year research program which included more than 35 studies and 1600 groups. The groups were limited to interacting task groups (i.e., high school basketball teams, surveying teams, bomber crews). Fiedler contends that in groups of this type the individual's contributions affect the performance of other group members and, consequently, the total group performance. In each of the studies conducted leaders were elected, appointed, or identified by sociometric rankings. The leaders's effectiveness was defined in terms of group performance on the primary task. On the basis of the initial studies, three situational variables were hypothesized to affect leadership: leader-member relations, task structure, and position power. Leader-member relations were defined in terms of the leader's personal attraction to group members and divided into good and poor classifications. Task structure was defined as the degree of organization imposed by superiors. It was classified as structured and unstructured. The third variable, position power, was defined on the basis of the degree of traditional authority associated with the office and classified as strong and weak. The subsequent studies supported a three dimensional (three situational variables with two levels each) contingency model of leadership. Fiedler concluded: (1) that group effectiveness is contingent on the appropriateness of the leader's style for the situation, (2) that the appropriateness of the leader's style depends on the degree to which the group situation allows the leader to exert influence, and (3) that, because leadership style is difficult to change it is better to change the work situational variables. Unlike most situational studies, the Fiedler research

program attempted to isolate specific situational variables which affect leadership.

The situational approach has not proven to be a fertile area for theory development. The statements posited by Fiedler's contingency model provide, at best, antecedent conditions for leadership in specific situations. The statements are not lawlike and have not been systematically related. Although the statements are empirically testable, they add little to the prediction of leadership. In addition, few specific situational variables have been conceptualized or measured well. Further, the situational approach has systematically excluded other potential variables (i.e., traits, behavioral characteristics).

The fourth approach deals with leadership styles. In the early research (Lippitt and White, 1943) three styles were investigated: autocratic, democratic, and laissez-faire. In later research the investigations were limited to authoritarian and democratic leadership styles. The Iowa studies (Krech, Crutchfield, and Ballachev, 1962) produced several comparisons concerning the effects of leadership styles. Authoritarian leadership as compared to democratic leadership produced a greater quantity of work, but less work motivation and less originality in work; a greater amount of aggressiveness toward the leaders and group members; more suppressed discontent; more dependent and submissive behavior; less friendliness in the group; and less "group-mindedness". Shaw (1964) concluded that authoritarian leadership "produced greater work output and lower morale than does non-authoritarian leadership. The question of quality of the work as a function of type of leadership is still unsolved." Perhaps even this conclusion is unwarranted. Gibb (1969) claims that: "Co-

hesiveness and high morale are largely the result of having one's expectations fulfilled" (p. 262). He cites the studies of Scott (1952) and Haythorn (1956) which both found that in situations where members expected authoritarian leadership morale was highest when that expectation was met. Fiedler (1964, 1965) specified two conditions under which authoritarian leadership is to be preferred - when the leader has power, good leader-member relations, and a clearly structured task; and when he lacks power, has poor leader-member relations, and an ambiguously structured task. In his three dimensional model these situations are the most favorable and the most unfavorable group conditions. In conclusion it should be noted that authoritarian leadership does produce a greater quantity of work, but its effects on morale and quality of work are unresolved.

The style approach, alone, is certainly nontheoretical. Few lawlike generalizations could be drawn from the research and no systematically related set of statements has been posited. Because the approach is limited to only one characteristic of leadership the ability to describe, explain, and predict leadership or group behavior is significantly limited.

The functional approach is the fifth conception of leadership and perhaps the most popular among speech communication researchers. Numerous classifications of leadership functions have been posited, including:

Cattell (1951)

-attachment
group maintenance

Bales (1958)

-task leader
socio-emotional leader

Hamblin (1958)

-substantive leader
procedural leader
socio-emotional leader

Stogdill (1959)	-integration morale productivity
Barnlund and Haiman (1960)	-creative and critical thinking procedural matters interpersonal relations
Bass (1960)	-consideration initiating structure
Cartwright and Zander (1960)	-opinion leader socio-emotional leader goal-setter leader
Likert (1961)	-employee-centered job-centered
Heslin and Dunphy (1964)	-task group maintenance
Cartwright and Zander (1968)	-goalachievement group maintenance
Sattler and Miller (1968)	-procedural problem-solving socio-emotional

Three primary functions have been conceptualized: process (procedural or goal setting), substantive (task or problem solving), and socio-emotional (interpersonal or group maintenance). Some researchers have preferred to group process and substantive functions together since the same persons tend to perform both functions.

Several researchers (Slater, 1955; Bales, 1958; Likert, 1961; and Heslin and Dunphy, 1964) have suggested that at least two types of leaders emerge in a small group: a task and a socio-emotional leader. Slater (1955) observed 20 groups which met four times to discuss administrative case problems. Observers used the Bales' interaction process analysis (IPA) instrument and group members ranked other members on contribution of ideas, guidance, and

personal attraction. After the fourth discussion participants named a leader. In this study two specialists emerged, a task leader and a socio-emotional leader. The task leader, who was also named the group leader, participated more than other members and had more problem-solving contributions (i.e., orientation, opinion, suggestions). The socio-emotional specialist was liked best and had more reaction contributions (i.e., agreement, tension release, solidarity) when compared to other group members.

Some researchers have suggested that individuals need to perform process and substantive functions (Bormann, 1969) if they are to be perceived as leaders. Mortensen (1964) applied content analysis to the communication content of six group discussions. He found that perceived leaders specialized in communication classified as: introducing and formulating goals, tasks, and procedures; eliciting communication; delegating and directing action; and summarizing group activity. These classifications could be categorized as process or substantive functions.

The functional approach has been useful for describing the communication behaviors of leaders and for leadership training. At most, the functional approach provides a classification scheme for leadership behavior. It does not provide a leadership theory - there are no lawlike generalizations to be systematically related or empirically tested. There are several other criticisms of this approach. First, the categories traditionally used by observers are neither mutually exclusive nor inclusive of all possible contributions (using IPA or Mortensen's categories). Second, measuring instruments have been used to time or count contributions or interactions, but have not attempted to evaluate contributions. Third, no explanation of

the reason perceived leaders perform the necessary functions has been offered. Thus, the approach does not provide for prediction of leadership.

The sixth approach to leadership, social influence, is concerned with power relationships in the group. The concept of power has been described as:

When the acts of an agent can (actually or potentially) modify the behavior of a person, or group of persons, the agent has power over that person, or group of persons (Collins and Guetzkow, 1964, p. 121).

Collins and Guetzkow have posited several propositions concerning social influence. The first set of propositions are related to the direct sources of power and interpersonal influence. They are:

- Proposition 6.1. Direct control of task environmental rewards is a source of power.
- Proposition 6.2. Control of the rewards associated with "friendly interaction" is a source of power.
- Proposition 6.2-A. The greater the personal attraction of other group members to a single individual, the greater the power of that individual.
- Proposition 6.2-B. The greater the interpersonal attraction among the members of a group, the greater the power of the group over the group members.
- Proposition 6.3. Control of punishment will be a source of power
 - (a) when the conditions of punishment are clearly specified and
 - (b) when compliance can be observed.
- Proposition 6.4. Punishment-based power (a) will not lead to interpersonal liking and (b) will inhibit the exercise of power based on interpersonal attraction (Collins and Guetzkow, 1964, p. 139).

The second set of propositions is concerned with the indirect sources of power. They are:

- Proposition 7.1. When several individuals are rewarded or punished as an entity, the group will have power over the individual members.
- Proposition 7.1-A. Under conditions of common fate, the individuals will develop interpersonal attraction.
- Proposition 7.1-B. The individual members will have more influence over each other under conditions of common fate.
- Proposition 7.2. An agent which has been successful in the past will have increased power.

- Proposition 7.3. An agent with a reputation of competence will have power even if the group members have not directly observed his success.
- Proposition 7.4. Formal designation as a leader, supervisor, boss, etc., will be a source of power.
- Proposition 7.4-A. Legitimate power will be weakened when influence attempts are outside the scope specified by formal designation (Collins and Guetzkow, 1964, p. 151).

The final set of propositions is concerned with the consequences of high and low power. They are:

- Proposition 8.1 High power persons possess more influence.
- Proposition 8.1-A. High power persons exert influence without making overt behavioral attempts to influence.
- Proposition 8.1-B. High power-status persons will initiate a greater total number of communications.
- Proposition 8.1-C. High power persons will initiate more communication classified as influence attempts.
- Proposition 8.1-D. High power persons will be successful in a larger percentage of the influence attempts which they do make than low power persons.
- Proposition 8.2. High power persons will be less affected by the efforts of others to influence them.
- Proposition 8.3. High power members will tend to form cliques.
- Proposition 8.4-A. Low power persons will behave deferentially toward high power persons.
- Proposition 8.4-B. Low power persons will be less deferential and less threatened when supported by their peers.
- Proposition 8.5. Low power persons will be suspicious of high power agents who can arbitrarily award or withhold important resources.
- Proposition 8.6. Low power persons will be threatened if ambiguity exists in their relationship with high power agents (Collins and Guetzkow, 1964, p. 165).

Due to the fact that this approach has a clear theoretical statement the research supporting it will not be summarized here. Collins and Guetzkow (1964) have cited research supporting each of these propositions in their book. In addition, Cartwright and Zander (1968) have provided an excellent summary of the research on social influence as well as a collection of major works supporting this approach (Lippitt, Polansky, Redl, and Rosen, 1952; Gold, 1958; French and Raven, 1959; Ring and Kelley, 1963; Jones, Gergen, Gumpert, and Thibaut, 1965; and Hurwitz, Zander, and Hymovitch, 1968).

In the evaluation of this approach, the theoretical criteria are met. The propositions provide lawlike generalizations and the statements are systematically related. The propositions are empirically testable; and, for the most part, have been empirically supported. The basic problem associated with this approach is its inattention to the conceptualization of a "group". The theory does not define a group nor has the research employed a consistent operationalization of a group. The research has, in general, investigated collections of individuals rather than groups. Further, most group variables are absent from this theory. Its emphasis is on individual(s) relationships with other individuals. There is little consideration of cohesion, productivity, and other products of group effort.

The seventh and final approach considered is Gibb's (1969) interaction theory. Gibb posits:

1. Groups are mechanisms for achieving individual satisfactions.
2. Any group is a system of interactions within which a structure emerges by the development of relatively stable expectations for the behavior of each member. Such expectations are an expression of each member's interactional relations with all other members and are, of course, determined by the other members' perceptions of his personal attributes and his performance on earlier occasions.
3. This role differentiation is a characteristic of all groups, and some role patterns appear to be universal. However, the nature of the group-task situation, the size of the group, and a great variety of other variables determine the role needs of the group-in-situation.
4. The association of a particular individual member with the performance of a role or pattern of roles is largely determined by the particular attributes of personality, ability, and skill which differentiate him perceptually from other members of the group.
5. Leadership is but one facet, though perhaps the most readily visible facet, of this larger process of role differentiation. Leadership is simply this concept applied to the situation obtaining in a group when differentiation of roles results in one or some of the parties to the interaction influencing the actions of others in a shared approach to common or compatible goals.

6. Leadership, like any other role behavior, is a function of personal attributes and social system in dynamic interaction. Both leadership structure and individual leader behavior are determined in large part by the nature of the organization in which they occur. Leadership structure is relative, also, to the population characteristics of the group, or in other words, to the attitudes and needs of the followers. Leadership inevitably embodies many of the qualities of the followers, and the relation between the two may often be so close that it is difficult to determine who influences whom and to what extent. For this reason it is possible for leadership to be nominal only (Gibb, 1969, pp. 270-271).

Research supporting statements from this theory can be found by examining research generated by the trait, situational, style, functional, and social influence approaches because this theory attempts to incorporate and integrate all the major variables known to be involved with leadership.

In evaluation the interaction theory does meet the theoretical criteria. It does provide lawlike generalizations which are systematically related and empirically testable. It also has at least two advantages over the social influence theory. First, it considers more major variables related to leadership in a small group: the personality of the leader; the attitudes, needs, and problems of the followers; the structure and syntality of the group; and the group situation. Second, the theory recognizes the interaction of individual perceptions of the leader, group members, group, and situation in producing leadership. Unfortunately, little of the research to date has investigated the interaction of these variables. Until the interaction is examined, results of research on leadership will continue to yield unexciting findings.

In summary, seven approaches to leadership have been examined. Only the social influence and interaction positions meet the criteria for a theory,

Of the two, the interaction theory is far superior. The authors recommend that this theory be given careful consideration in all future leadership research.

Methodological Evaluation

An important consideration in the evaluation of leadership research is the quality of the methodology employed. This section briefly discusses general, theoretical, conceptual, and measurement issues relevant to leadership research. Still, the concern of the authors is to evaluate the research in terms of the isomorphism between the theory and the methodology that validates it.

There are several general observations that should be made concerning the methodology of leadership research. We have previously dismissed notions that the study of leadership demands non-scientific methodologies. Many criticisms which shall reference leadership have been applied to all small group research (McGrath and Altman, 1966; Bormann, 1970; Gouran, 1970, Lashbrook, 1970; Mortensen, 1970; and Fisher, 1971). First, leadership studies vary widely in rigor and methodology from case studies to extensive, carefully conducted experiments. Second, research reporting is equally variable--some studies are thoroughly reported while others are missing vital sections. In some cases the theoretic rationale is completely absent. Hypotheses are not always specified. Measurements and operationalizations are often not reported. In several cases the results and analyses are incompletely reported. A third generalization is that leadership researchers lack a shared language, and there is no indicated movement in such a direction. There is great diversity in the definition and operationalization of leadership and related variables. Leadership has been operationalized in numerous ways--

(i.e., election, appointment, sociometric choice, observation, member perception, and frequency of interactions in general and of a specific type). Often these same operationalizations have been used to define other concepts (i.e., interpersonal attraction, source credibility, prestige, status, power). Such differences make generalization difficult. Fourth, replication of leadership studies is almost nonexistent. Replication is essential for the systematic accumulation of knowledge that is necessary for theoretical advancement. A fifth observation is that most leadership research lacks a theoretical foundation. Empirical questions appear to be derived from armchair philosophy rather than theory (and often from the seat rather than the arm of the chair). A final consideration is the lack of multivariate and process oriented analyses of leadership. Because the small group process is so complex and because so many variables are interacting at one time, single-variable analysis seems inappropriate and misleading. It is the impression of the authors that the statistical designs employed by small group leadership researchers are often a rather arbitrary and incidental concern stemming from the nature of the data. That is, the existence of antecedent conditions rather than derived hypotheses are actually being put under test. The results of such research offers little of value to those interested in theory construction, regardless of the statistical significance that may be achieved.

Inattention to theoretical considerations is perhaps the most persistent problem in leadership research. This lack is due to the diversity of definitions and operationalizations and to the absence of a theoretical foundation. In the first section of this paper it was noted that a leadership theory does exist. If the considerations of the interaction theory are used

to determine the appropriate design and measurement for leadership studies knowledge of leadership will vastly improve.

Conceptualization is another primary problem area in leadership research. The concepts "group" and "leadership" have been inconsistently defined and/or operationalized. In actual research groups have ranged from real-life groups in action to short-term laboratory groups (even 20 minute groups). In spite of the inconsistencies in research there appear to be several areas of potential agreement: a group is not just a simple collection of individuals; a group consists of two or more members; group members interact; and the group has a purpose or goal. Gibb adds the characteristic of structure in his theory of leadership. The interaction theory states that a group is "a system of interactions within which a structure emerges by the development of relatively stable expectations for the behavior of each member " (Gibb, 1969, p. 270). In terms of leadership the inconsistencies are even more confounding. As specified earlier, leadership has been identified by observers, group members, or occupancy of a given office. There seems to be a trend toward defining leadership in terms of measureable perceptions of group members and the performance of leadership functions. Whether these measurements are themselves theoretical is never really addressed by the researchers. In testing any theory the theoretical conceptualization should be isomorphic with the operationalization of variables.

— The final methodological issue is measurement. Assuming that leadership should be operationalized in terms of group member perceptions and/or performance of leadership functions, present measurements are inadequate. Present member perception instruments tend to sample only a small part of the

universe of characteristics that individuals use in evaluating leadership. The authors of this paper view leadership as a multidimensional construct. Until multivariate techniques are used to develop scales for measurement of the dimensions of leadership, group member perceptions will provide little knowledge of the concept of leadership. The second type of measure, which is concerned with the quantitative performance of leadership functions (i.e., Bales' IPA), has been better developed. However, it too needs improvement. The scales that have been used are neither all-inclusive nor mutually exclusive. This problem can be minimized by considering other possible categories and changing some of those employed. Another problem with this measurement is the sole reliance on counting contributions in each category. The instrument might be improved by qualitative evaluation of the contributions. The contributions might also be timed or an indication made of whom the person is interacting with (or the fact that it is not an interaction). With improvement both of these types of measurement will help in the development of research projects to test leadership theory.

In this paper seven approaches to leadership have been evaluated theoretically. Gibb's interaction theory was the only one that met the three criteria for a theory. The authors of this paper do not contend that this is a final answer to leadership theory, but they do recommend that more research should be theoretically based and, at present, the interaction theory can provide that base. In addition to the theoretical evaluation, leadership research was examined methodologically. General, theoretical, conceptual, and measurement issues relevant to leadership research were discussed. Weaknesses were isolated and possible improvements were suggested. With theoretical and

methodological improvements leadership research can result in a significant accumulation of knowledge.

References

- Bales, R. F. Interaction process analysis: a method for the study of small groups. Cambridge, Mass.: Addison-Wesley, 1950.
- Bales, R. F. Task roles and social roles in problem-solving groups. In E. Maccoby (Ed.), Readings in Social Psychology. New York: Holt, Rinehart, and Winston, 1958.
- Barnlund, D. C. Consistency of emergent leadership in groups with changing tasks and members. Speech Monographs, 1962, 29, 45-52.
- Barnlund, D. C. and Haiman, F. S. The dynamics of discussion. Boston: Houghton Mifflin, 1960.
- Bass, B. M. Leadership, psychology and organizational behavior. New York: Harper, 1960.
- Bird, C. Social psychology. New York: D. Appleton, 1940.
- Bormann, E. G. Discussion and group practices. New York: Harper, 1969.
- Bormann, E. G. The paradox and promise of small group research. Speech Monographs, 1970, 37, 211-217.
- Cartwright, D. and Zander, A. (Eds.) Group dynamics: research and theory. (2nd ed.) Evanston, Ill.: Row, Peterson, 1960.
- Cartwright, D. and Zander, A. (Eds.) Group dynamics: research and theory. (3rd ed.) New York: Harper & Row, 1968.
- Collins, B. E. and Guetzkow, H. A social psychology of group processes for decision-making. New York: John Wiley, 1964.
- Fiedler, F. E. A contingency model of leadership effectiveness. In I. Berkowitz (Ed.), Advances in experimental social psychology. New York: Academic Press, 1964, 149-190.
- Fiedler, F. E. The contingency model: a theory of leadership effectiveness. In H. Proshansky and B. Seidenberg (Eds.), Basic studies in social psychology. New York: Holt, Rinehart, and Winston, 1965, 538-551.
- Fiedler, F. E. Personality and situational determinants of leadership effectiveness. In D. Cartwright and A. Zander (Eds.), Group dynamics: research and theory. (3rd ed.) New York: Harper and Row, 1968.
- Fisher, B. A. Communication research and the task-oriented group. Journal of Communication, 1971, 21, 136-149.
- French, J. R. P. and B. H. Raven. The bases of social power. In D. Cartwright (Ed.), Studies in social power. Ann Arbor: University of Michigan Press, 1959, 118-149.

- Gibb, C.A. Leadership. In G.Lindzey and E. Aronson (Eds.), Handbook of Social Psychology, IV. Reading, Mass.: Addison-Wesley, 1969, 205-282.
- Gold, M. Power in the classroom. Sociometry, 1958, 21, 50-60.
- Gouran, D. Response to "The paradox and promise of small group research". Speech Monographs, 1970, 37, 217-218.
- Hamblin, R. L. Leadership and crises. Sociometry, 1958, 21, 322-335.
- Haythorn, W. The effects of varying combinations of authoritarian and equalitarian leaders and followers. Journal of Abnormal and Social Psychology, 1956, 53, 210-219.
- Heslin, R. and Dunphy, D. Three dimensions of member satisfaction in small groups. Human Relations, 1964, 17, 99-112.
- Hook, S. The hero in history. New York: John Day, 1943.
- Hurwitz, J, A. Zander, and B. Hymovitch. Some effects of power on the relations among group members. In D. Cartwright and A. Zander (Eds.), Group dynamics: research and theory. New York: Harper and Row, 1968.
- Jennings, E. E. An anatomy of leadership. New York: Harper, 1960.
- Jones, E., K. Gergen, P. Gumpert, and J. Thibaut. Some conditions affecting the use of ingratiation to influence performance evaluation. Journal of Personality and Social Psychology, 1965, 1, 613-625.
- Krech, D., R.S. Crutchfield, and E.L. Ballachey. Individual in society (2nd ed.). New York: McGraw-Hill, 1962.
- Lashbrook, W.B. Cybernetic groups: the future of interaction process analysis. Paper presented at the meeting of the Speech Communication Association of America, New Orleans, December, 1970.
- Likert, R. New patterns of management. New York: McGraw-Hill, 1961.
- Lippitt, R., N. Polansky, F. Redl, and S. Rosen. The dynamics of power. Human Relations, 1952, 5, 37-64.
- Lippitt, R. and R.K. White. The "social climate" of children's groups. In R.G. Barker, J.S. Kounin, and H.F. Wright (Eds.) Child behavior and development. New York: McGraw-Hill, 1943, 485-508.
- McGrath, J.E. and Altman, I. Small group research: a synthesis and critique of the field. New York: Holt, Rinehart, and Winston, 1966.

- Mortensen, C.D. A content analysis of leadership communication in small, task-oriented discussion groups. Unpublished master's thesis, University of Minnesota, 1964.
- Mortensen, C.D. The status of small group research. Quarterly Journal of Speech, 1970, 56, 304-309.
- Newcomb, T.M., R.H. Turner, and P.E. Converse. Social psychology. New York: Holt, Rinehart, and Winston, 1965.
- Ring, K. and H. Kelley. A comparison of augmentation and reduction as modes of influence. Journal of Abnormal and Social Psychology, 1963, 66, 95-102.
- Rudner, R.S. Philosophy of social science. Englewood Cliffs, N.J.: Prentice-Hall, 1966.
- Sattler, W. H. and N. E. Miller. Discussion and conference. Englewood Cliffs, N. J.: Prentice-Hall, 1968.
- Scott, E. L. Perceptions of organization and leadership behavior. Columbus: Ohio State University Research Foundation, 1952.
- Shaw, M. E. Communication networks. In I. Berkowitz (Ed.), Advances in Experimental Social Psychology. New York: Academic Press, 1964, 111-147.
- Slater, P. E. Role differentiation in small groups. American Sociological Review, 1955, 20, 300-310.
- Stodill, R. M. Personal factors associated with leadership: a survey of the literature. Journal of Psychology, 1948, 25, 35-71.
- Stodill, R. M. Individual behavior and group achievement. New York: Oxford University Press, 1959.